Bridging the Divide : Enabling Effective Learning !

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Dr. Alan Moran

Head of OLAT

Multimedia & E-Learning Services

Informatikdienste

University of Zurich

http://www.olat.org/

OLAT
Online Learning and Training

Learning and Technology

Learning is an intellectual, emotional and social process through which knowledge, behaviour, values and insights are won.

Teaching and learning is already supported by a rich diversity of models (e.g., Kolb learning styles, Blooms taxonomy) and delivery modes (e.g., autonomous, life long, problem based learning).

The wide range of learning systems (e.g., LMS, VLE, CBT) and related stardards (e.g., IMS Global), tools and services bears witness to the attempts of technologists to capture the essential elements of teaching and learning in a form that provides efficient and effective online modes of delivery.

The driver, however, is seldom technology but rather society !

Online Learning And Training (OLAT)

OLAT is the strategic e-Learning platform of the University of Zurich (UZH) catering for the needs of over **60,000 users** taking over **5,000 courses** at nearly **50 Universities and Colleges** throughout Switzerland and the surrounding regions. OLAT manages millions of academic resources.

Institutions of higher learning constitute the primary segment for OLAT which focuses on leveraging existing infrastructure to deliver value in the form of **services** that support teaching and learning **processes**.

OLAT is continually expanding its value network and is building long-term strategic partnerships that seek to define and shape e-Learning in order to meet the challenges of an increasingly dynamic learning environment.

Online Learning And Training (OLAT)

The approach of OLAT can be summarized in terms of the following:

– Focus on the higher educational sector (e.g., Universities, FH/TH)

– Recognition of the diversity found in delivery

– Building of partnerships (e.g., Educators, Suppliers)

– Understanding of teaching and learning as a process

– Delivery of process through services (i.e., SOA)

– Continual focus on quality improvement

– Accepting change as normal (e-Learning, m-Learning, x-Learning !)

What are Teaching and Learning Processes ?

Processes reflect the organisation's approach towards the repeated accomplishment of specific **outcomes** defined in term of **triggers**, **activities** and **responsiblities**.

Consistency in processes is key to the delivery of high quality outcomes – this can usually be achieved through accurate and timely **information** concerning the performance of the process. This is part of what is understood by „management" in LMS !

Processes also provide a framework with which to ensure continual improvements since there is a clear understanding of what the final outcome should be and how it is arrived at.

Process Example: e-Assessment

Trigger is the decision that a course is to be assessed online rather than using pencil and paper.

Activities (and **Responsibilities**) include:

– Set up of the examination environment (System Administrator)

– Create examination questions, set date and invite students (Examiner)

– Admission of students to the examination (Invigilators)

– Sitting the exam (Students)

– Storage of answers, marking and informing students (Examiner)

Outcome is that students can be assessed on what they have learned during the semester !

E-Assessment Environment

What are OLAT Services ?

Services are well-defined units of functionality that can be considered the „building blocks" that ultimately underpin teaching and learning processes.

Services are very focused on a specific task or set of related tasks that they do very well. For example a security service is very good at checking passwords and making authorization decisions (e.g., which students are allowed to attend courses, who is permitted to edit the materials on a course etc.)

Service can sometimes be accessed outside of OLAT. This is very useful where integration is important (e.g., SAP/CM) or when providing access to mobile devices (i.e., m-Learning).

Service Example: e-Assessment

The following sequence of events is indicative of how the e-Assessment process cited earlier makes use of services:

– When the examination has been released by the Examiner, the **notification service** advises all participants of the topic, date and location of the examination.

– A student arrives at a lecture where an e-assessment examination is taking place. Whilst having their identity card scanned the **security service** is invoked to their registration.

– During login the student enters their username and password and these are validated by the **security service**.

No single serivce is a process, instead many services are used by a process.

Processes, Services and Effective Learning

To enable **effective learning** it is first important to fully understand the teaching and learning environment !

– Map out all the important steps within a process

– Discuss the process with stakeholders (e.g., tutors) until clear agreement and understanding has been reached

– Ensure the „language" of stakeholders is reflected in the language of the process (e.g., course, learning outcome, assessment)

Processes support continual quality improvement by enabling focus to be directed on the individual services.

The Importance of Stakeholders

The key to ensuring effective e-Learning is to make sure the right blend of people are involved !

– **Subject Matter Experts**: Concerned with the stewardship and further research of domain specific knowledge (e.g., quantum mechanics, germanic linguistics, artificial intelligence etc.).

– **Pedagogic/Didactics Experts**: Focused on promoting understanding of teaching and learning processes (e.g., Kolb Cycle, Bloom's Taxonomy, Learning Models etc.).

– **Technology Experts**: Aim to support the electronic delivery of teaching and learning (e.g., Software, Hardware etc.).

All three must be involved in defining and improving the processes.

The Importance of Stakeholders

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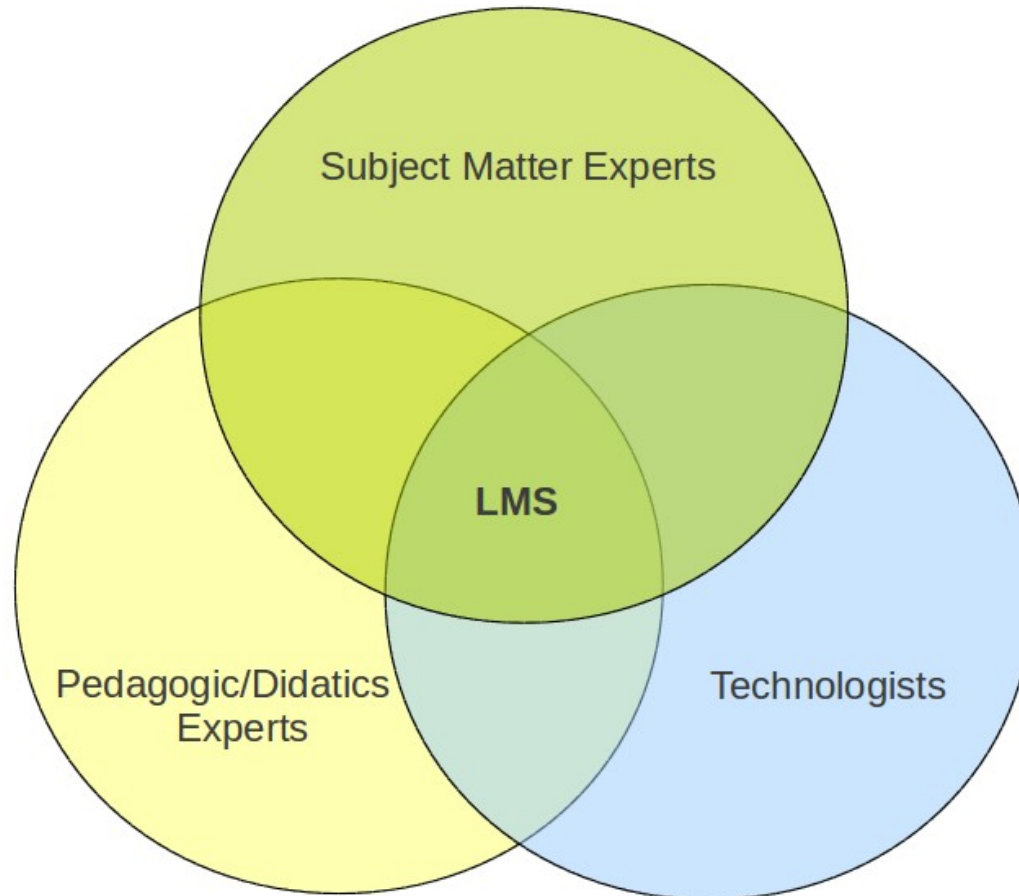
Stakeholders Example: Problem Based Learning

Projects in OLAT frequently require the presence of stakeholders from each of the respective domains.

- Animal pathology is concerned with the understanding of disease processes divided into general pathology (reactions of multi-cellular organisms to adverse environmental effects) and organ specific pathology (malfunctions of individual organ systems).

- The seven step problem based learning model as the basis for learning about animal pathology (i.e., examination, identification, analysis, explanation, learning, study, synthesis).

- Problem based learning course type in OLAT that explicitly supports each of the seven steps integrating collaborative learning and the tutor's role as mentor.

Thank You !

....Questions ?